

QUARTERLY REPORT

February 1st, 2005 to April 30th 2005

Project Title

Montana Department of Transportation (MDT)
Determine Current Rates of Motor Fuel Tax Evasion in the State of Montana

Principal Investigator

Patrick Balducci
Principal Research Scientist
Battelle Memorial Institute

Research Assistants

The work performed under this contract has been performed by the Battelle Memorial Institute with the assistance of our subcontractor, Montana State University.

Introduction

This third quarterly report covers the period beginning February 1, 2005 and ending on April 30, 2005. During the last quarter, the Battelle Team completed elements of Task 2 (comparative assessment of neighboring states'/provinces' enforcement programs), Task 3 (analysis of tax codes and legislation), Task 4 (industry enforcement activities), Task 5 (mapping the motor fuel distribution system) and Task 6 (data analysis), as described below in the Work Progress section of this report. The next section provides an overview of the project objective. The report also provides an overview of the progress completed during the last quarter and a projection of work to be performed in the next quarter. Finally, the report compares anticipated budget/work completed to the project schedule.

Project Objective

The primary objective of the research project is to determine the extent and underlying reasons for motor fuel tax evasion in Montana. The project will also generate recommendations concerning where best to focus enforcement efforts and make changes to tax code to close the gap between total tax liability and actual tax collections in Montana. The specific objectives of the project are to:

- Critically assess administrative and enforcement characteristics of border state practices, identify how these characteristics have traditionally correlated with certain types of evasion and compare these programs to Montana State practices.
- Identify evasion techniques and note administrative, enforcement and legislative strategies used to curtail motor fuel tax evasion.
- Identify and examine data that could be used to assist Montana in measuring motor fuel tax evasion.
- Develop and demonstrate a methodology for estimating state motor fuel tax evasion.
- Develop recommendations for making changes to the current administrative, enforcement and legislative framework established for the motor fuel tax program in Montana and perform benefit-cost analysis to rank these proposed changes based on the computed benefit-cost ratio for each proposed programmatic change.

Work Progress

Work completed during the past quarter focused primarily on activities outlined in Tasks 2 through 6. The Battelle Team completed data collection and report preparation activities on Task 2. Task 2 encompassed the compilation and validation of data comparing tax programs across the region and preparing a report comparing the characteristics of these programs. The research team also completed its analysis of tax codes under Task 3, including recommendations for closing gaps in Montana's tax codes. Task 4 activities focused on conducting interviews with industry representatives and documenting industry efforts to enforce tax policy. The research team collected data and prepared GIS maps required to map the motor fuel distribution systems in Montana and neighboring states and provinces. Task 6 activities centered on the collection and analysis of data required to conduct evasion analysis.

A summary of each activity performed, along with percentage of work completed by task during the past quarter, follows:

- Task 1 – Kickoff Meeting, Literature Review, Enforcement/Compliance Activities

No work was performed on Task 1 during this past quarter.

Task 1 represents 16.8% of both the total work effort and the budget. Task 1 is 100% complete.

- Task 2 – Impact of Enforcement Programs
 - Collected data through follow-on collection activities.
 - Prepared tables that examine the compliance programs in each border state and province.
 - Developed a cover letter and attached it to tables that were sent out for verification to all the border states/provinces.
 - Compiled data to characterize and compare motor fuel programs in Montana and bordering states and provinces
 - Collected historical data regarding state and provincial motor fuel tax programs.
 - Drafted the Task 2 report.

Task 2 represents 10.9% of both the total work effort and budget. Task 2 is 100% complete.

- Task 3 – Analysis of Tax Codes, Legislation
 - Examined relevant literature / legal codes.
 - Drafted the Task 3 report.

Task 3 represents 8.9% of both the total work effort and budget. Task 3 is 100% complete.

- Task 4 – Interview Representatives of Entities Involved with Fuel Distribution
 - Obtained a list of entities involved in fuel distribution within the State of Montana.
 - Developed an interview protocol, including objectives and data needs for the Task 4 analysis.
 - Conducted interviews with key industry representatives.
 - Drafted sections of a report detailing the interview findings.

Task 4 represents 5.6% of both the total work effort and budget. Task 4 is 75% complete.

- Task 5 – Examination of Fuel Distribution and Compliance Programs
 - Defined the content of the maps to be developed.
 - Reviewed and analyzed data required to populate the GIS database.
 - Developed GIS maps to compare Montana's domestic program and distribution system with those in neighboring state and provinces.

Task 5 represents 10.9% of both the total work effort and budget. Task 5 is 60% complete.

Task 6 – Data Analysis

- Defined data required to perform the evasion analysis.
- Examined data in order to determine the availability and limitations inherent in the data required to perform the evasion analysis.

Task 6 represents 7.6% of both the total work effort and budget. Task 6 is 30% complete.

No work has been performed on Tasks 7-10.

Issues

The most significant issues faced by the project team include those related to model development and data. More specifically, the data required to perform the evasion analysis have limitations that must be addressed. The timing of the MDT project, which requires the deployment of an evasion model in the next 3-4 months, raises a modeling issue. The project team has proposed a methodology for estimating evasion to the National Cooperative Highway Research Program (NCHRP) and is awaiting input on the proposal. Any model deployed in Montana would almost certainly benefit from the input we will receive from the NCHRP Panel and the Practitioner Review Team (PRT) that will be formed in order to review the proposal. Based on this input, refinements will be made to the final model, and this project would benefit from those refinements.

Major Accomplishments or Discoveries

The project team has examined compliance and enforcement programs as well as the physical infrastructure used in the distribution of motor fuel for the following states and provinces:

- Alberta
- British Columbia
- Idaho
- North Dakota
- Saskatchewan
- South Dakota
- Utah
- Washington
- Wyoming

Motor fuel excise tax programs were compared through the examination of numerous elements, including: points of taxation, fuel tax rates, treatment of alternative fuels, dyeing requirements, exemptions and refunds, licensing and bonding requirements, tax collection and motor fuel tracking, Native American issues, on-road enforcement, auditing and fines and penalties. Based on this initial assessment, we have discovered a number of reasons to believe that evasion may be a significant issue in Montana:

- British Columbia and Saskatchewan neither tax nor dye kerosene leaving the opportunity to smuggle tax free and dye free kerosene into Montana.
- Montana has the highest tax rates for gasoline, gasohol, biodiesel and diesel of any of its bordering states and the highest in the region except for the diesel tax rate, which is only matched by the State of Washington.
- The gap between Wyoming and Montana tax rates provides significant monetary incentive to evade Montana's motor fuel tax through import-export schemes and fraudulent IFTA filing.
- Alberta and British Columbia allow splash dying for tax exempt diesel, enabling evaders to smuggle tax free diesel into Montana and sell it at taxed rates without remitting the tax.
- There is no motor fuel excise tax on fuel sold at Native American retail stations in Idaho. Further, there is tribal land bordering in Idaho that directly borders Montana. This fact leaves the potential for border evasion schemes exploiting the status of the Idaho Native American tribes.
- While most of the jurisdictions track motor fuels in the region, total fuel accountability is not evident.
- Interviewees noted that there exists a lack of consistent inter-jurisdictional sharing of information between Montana and its bordering states and provinces.
- There are three jurisdictions bordering Montana that are not yet participants in the IFTA clearinghouse (British Columbia, Saskatchewan and South Dakota).
- Four states or provinces in the region (Utah, British Columbia, Wyoming, Alberta and Idaho) rely completely on the IRS to perform on-road inspections.
- Montana DOT taxes at the distributor level. Historic federal and state data suggest that moving the point of taxation up the distribution chain generally enhances tax collections.
- Native American reservations are present in Montana and offer limited opportunities for evasion.

The research team has completed its examination of tax codes, comparing Montana's codes with those in surrounding states and provinces. Tax codes relating to the following elements were examined: penalties and fines, examination of records and equipment, statute of limitations, seizure of assets, licensing and security, point of taxation, uniformity with other states, required information and tax forms, method of reporting and remitting tax, importation and exportation, refunds or credits and burden of proof. For

each tax code element, the research team noted gaps and provided recommendations for closing those gaps. Best practices in other states have also been identified.

During the past quarter, the research team contacted industry representatives to examine the impact of industry enforcement programs on compliance. Topics covered during the interviews included: the process for compliance, report production and filing, compliance costs, availability and shortcomings in tax data, opportunities for evasion, industry efforts to improve compliance, electronic filing and electronic funds transfer, and the impact of Native American reservations on compliance. A report was drafted highlighting the findings of this examination.

Data were collected in order to support the GIS mapping of the region's motor fuel distribution system. The GIS maps identify the geographic location of pipelines, terminals, refineries, Native American reservations, and other features. Maps were also used to detail IFTA audit rates, points of taxation and other regional motor fuel programmatic elements.

Work Projection

During the next quarter, ending July 31, 2005 we plan to perform the following activities:

- Complete the analysis of industry enforcement activities.
- Complete mapping of the motor fuel distribution systems in Montana and neighboring states and provinces.
- Propose methods for estimating evasion in Montana.
- Collect data required to perform analysis and consider costs associated with enforcement and compliance programmatic efforts to curb evasion techniques.
- Model evasion and prepare preliminary estimates of revenue lost to non-compliance.

Schedule

The project is slightly behind schedule and under budget when comparing the work performed to date with the budget expended on each task. As shown in Figure 1, we targeted Tasks 1 through 5 for 100% completion, Task 6 for 80% completion, Task 7 for 40% completion and Task 8 for 15% completion at the end of this quarter. Thus far, Tasks 1 through 3 are 100% complete, and Tasks 4-6 are slightly behind schedule at 75%, 60% and 30% completed, respectively. However, the work accelerated during this past quarter and the project is in the process of being brought back on schedule and all deliverables will be provided on-time and within budget.

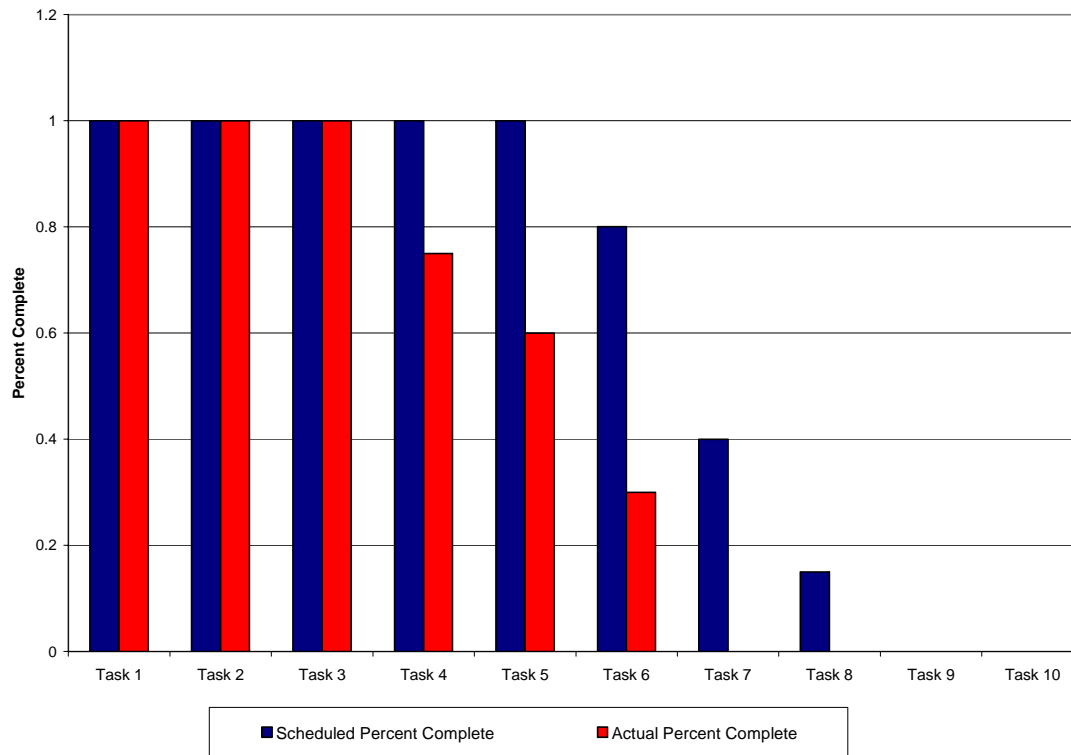


Figure 1 – Work Progress through April 30, 2005.

Budget

The project budget identified roughly \$44,095 for the third quarter of the research plan and \$28,489 was expended. The total budget through the first three quarters of the research plan totals \$131,557. To date, the research team has expended roughly \$58,791 or 45% of the total amount budgeted (Figure 2).

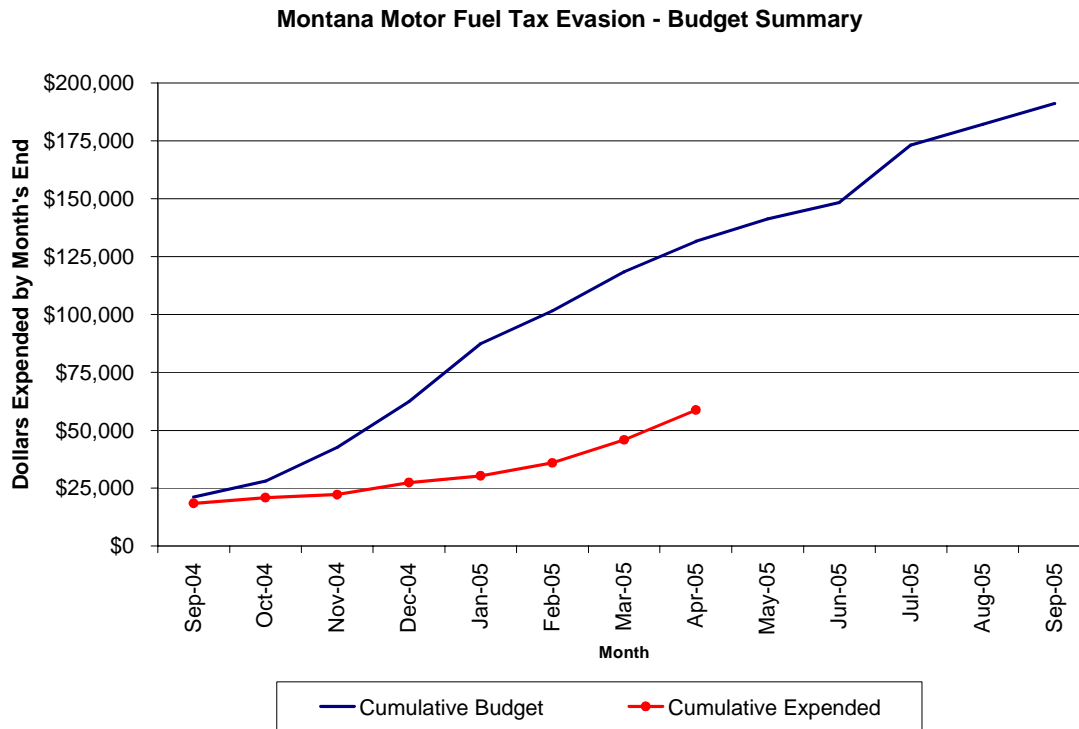


Figure 2 – Projected and Actual Expenditures through April 30, 2005.

Budgeted and Projected Expenditures – State and Federal Fiscal Years (SFY and FFY) 2004 and 2005

Table 1 presents an analysis of the project budget, including the total project budget, total invoiced through April 30 of 2005, the remainder of the project budget, total expenditures through SFY and FFY 2004 and projected expenditures through SFY and FFY 2005.

Costs for all tasks will be incurred in the State of Montana's FY 05 (July 1, 2004 – June 30, 2005), with the exception of a portion of those incurred on Tasks 8 and 9, and all of Task 10. Those tasks will carry into the State of Montana's FY 06 (July 1, 2005 – June 30, 2006). The remainder of the unexpended balance (\$160,777) will be totally expended during FFY 2005 (October 1, 2004 – September 30, 2005).

Table 1 Budgeted and Projected Expenditures for State and Federal Fiscal Years (SFY and FFY) 2004 and 2005.

Budget Items	Budgeted/Projected	Actual
Total Budget	\$191,079	\$191,079
Total invoiced through January 31, 2005	\$131,557	\$58,791
Total project budget remaining as of January 31, 2005	\$59,522	\$132,288
Total expenditures through SFY 2004	0	0
Total expenditures through FFY 2004	\$21,160	\$18,501
SFY 2005 expenditures	\$148,356	\$58,791 ¹
FFY 2005 expenditures	\$169,919	\$40,289 ¹

¹Actual amounts represent those expended within SFY and FFY 2005 through April 30, 2005.